

members;

a low transmittance glass window positioned within window portions of said vehicle structure, wherein said low transmittance glass window increases a thermal resistance of the vehicle;

an energy efficient insulator attached to an inside portion of said vehicle structure to increase a thermal resistance of the vehicle; and

an energy efficient thermal management system providing exterior thermal management to an engine compartment and interior thermal management to an occupant compartment for the vehicle, wherein said energy efficient thermal management system consumes less thermal energy as a result of the increased thermal resistance of the vehicle.

a2 4. (AMENDED) A thermally energy efficient vehicle as set forth in claim 1

wherein said energy efficient insulator provides a thermal barrier and an acoustic barrier.

5. (AMENDED) A thermally energy efficient vehicle as set forth in claim 1

wherein said energy efficient insulator is a gas-filled panel.

a3 9. (AMENDED) A thermally energy efficient vehicle as set forth in claim 1

wherein said low transmittance glass window is made from a glass/polycarbonate composite material.

a4 11. (AMENDED) A thermally energy efficient vehicle comprising:

a vehicle structure, wherein said vehicle structure includes generally interconnected structural members that form a frame for the vehicle and generally planar

interconnected panels that define a shape of the vehicle, wherein a thermally efficient structural material is utilized for said structural members to reduce a thermal mass of the vehicle;

a low transmittance glass window positioned within window portions of said vehicle structure, wherein said low transmittance glass window includes two parallel sheets of glass separated by an air gap, to increase a thermal resistance of the vehicle;

an energy efficient insulator attached to an inside portion of said vehicle structure to increase a thermal resistance of the vehicle; and

an energy efficient thermal management system providing exterior thermal management to an engine compartment and interior thermal management to an occupant compartment for the vehicle, wherein a thermal energy consumption capacity of said energy efficient thermal management system is decreased since said energy efficient thermal management system consumes less thermal energy resulting from the increased thermal resistance and reduced thermal mass of the vehicle.

A5
13. (AMENDED) A thermally energy efficient vehicle as set forth in claim 11 wherein said energy efficient insulator provides a thermal barrier and an acoustic barrier.

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17. (AMENDED) A thermally energy efficient vehicle as set forth in claim 11 wherein said low transmittance glass window is made from a glass/polycarbonate composite material.

18. (AMENDED) A thermally energy efficient vehicle comprising:
a vehicle structure, wherein said vehicle structure includes generally interconnected structural members that form a frame for the vehicle and generally planar

interconnected panels that define a shape of the vehicle, wherein a thermally efficient structural material is utilized for said structural members to reduce a thermal mass of the vehicle;

an energy efficient insulator attached to an inside portion of said vehicle structure to increase a thermal resistance of the vehicle;

a low transmittance glass window positioned within window portions of said vehicle structure, wherein said low transmittance glass window includes two parallel sheets of glass separated by an air gap, to increase the thermal resistance of the vehicle; and

an energy efficient thermal management system providing exterior thermal management to an engine compartment and interior thermal management to an occupant compartment for the vehicle, wherein a thermal energy consumption capacity of said energy efficient thermal management system is decreased since said energy efficient thermal management system consumes less thermal energy resulting from the increased thermal resistance and reduced thermal mass of the vehicle.